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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
RYMAN, DANIEL J	

ART UNIT	PAPER NUMBER
2616	

DATE MAILED: 05/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/620,715	NIIMI ET AL.	
	Examiner	Art Unit	
	Daniel J. Ryman	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 April 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4 and 6-14* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4 and 6-14* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 4/24/2006 have been fully considered but they are not persuasive. On pages 2-3 of the Response, Applicant asserts that "Astle is different from applicant's claimed invention." Specifically, Applicant asserts that "Column 7 of Astle describes a different allocation of bandwidth in contrast to applicant's claimed allocation" since Astle "describes that the bandwidth is divided evenly among the terminals outputting the allocation requests." Examiner, respectfully, disagrees that Astle discloses that the bandwidth is always divided evenly among the terminals. In Astle, "if there is not enough available bandwidth to provide the requested bandwidth to each of the allocation requests at a particular *level*, the resource allocation device allocates a minimum amount of bandwidth to each information *type*" (col. 7, lines 5-13) (emphasis added). In Astle, "Level" represents a priority level of the stream, namely, "the urgency of a certain bit stream being afforded its requested bandwidth" (col. 6, lines 35-39). "Type" represents "the type of information to be transferred such as, for example, audio, control data, video, and other types of information" (col. 6, lines 42-45). Thus, Astle discloses that the highest priority levels are allocated bandwidth first, followed by the lower priority levels (Fig. 8 and col. 7, lines 52-67). If there is insufficient bandwidth to provide the requested bandwidth to each of the allocation requests at a particular priority level, then the resource allocation device will allocate bandwidth according to the priority of the type of data within each priority level (Fig. 9 and col. 8, lines 5-35). In short, contrary to Applicant's assertion, identical bandwidth is not evenly allocated to each terminal that has issued requests for bandwidth. Rather, Astle only discloses allocating identical bandwidth to each terminal when the

terminals are *at a given priority level* and there is insufficient bandwidth to provide the requested bandwidth to each of the allocation requests at this priority level.

2. In view of the foregoing, Examiner maintains that the claims are obvious in view of the cited prior art.

Specification

3. Examiner requests that Applicant update the application information see on page 1, lines 4-7 of the specification in order to include any changes to the status of the application.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1-4, 6, 8-11, 13, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Edens et al (USPN 6,611,537), of record, in view of Astle et al. (USPN 6,396,816), of record.

6. Regarding claim 1, Edens discloses a picture distribution system for distributing picture data from a distribution device to a plurality of receiving devices, comprising: a network where a plurality of logical channels are established in a time division multiplex method (col. 9, line 56-col. 10, line 21); a distribution device (DSS tuner or DVD player) distributing picture data via a logical channel designated by a distribution instruction (col. 13, line 58-col. 14, line 30; col. 40, lines 7-44; col. 42, line 58-col. 44, line 33; and col. 53, line 64-col. 54, line 55); a plurality of receiving devices (televisions) receiving picture data from respective logical channels designated

by receiving instructions (col. 13, line 58-col. 14, line 30; col. 40, lines 7-44; col. 42, line 58-col. 44, line 33; and col. 53, line 64-col. 54, line 55); and an allocation unit for allocating respective bandwidth to the plurality of logical channels used to transmit picture data according to the requirements of each particular media stream (col. 25, lines 9-12; col. 29, line 46-col. 30, line 37; col. 32, lines 28-43; col. 33, lines 19-67; col. 34, lines 17-26; and col. 53, line 64-col. 54, line 55).

Eden does not expressly disclose an allocation unit for allocating respective bandwidth to the plurality of logical channels used to transmit picture data according to a number of picture data to be transmitted; however, Eden does disclose that the bandwidth is allocated according to the requirements of each particular media stream (col. 25, lines 9-12). Astle teaches, in a system for transmitting multimedia streams, that the bandwidth of a video stream will vary according to the encoding technique used to encode the video stream, where the encoding technique dictates the quality of the video (col. 5, line 66-col. 6, line 14). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to allocate respective bandwidth to the plurality of logical channels used to transmit picture data according to a number of picture data to be transmitted since this is determine the quality of the received picture data stream.

Edens does not expressly disclose that the allocation unit allocates a first bandwidth to each of the logical channels when a total bandwidth allocated to the logical channels does not exceed a predetermined threshold bandwidth, and when a total bandwidth allocated to the logical channels exceeds the threshold bandwidth said allocation unit allocates the first bandwidth to each of a part of the logical channels and a second bandwidth, which is smaller than the first bandwidth, to each of another part of the logical channels. Astle teaches, in a system for

transmitting multimedia streams, having an allocation unit allocate a first bandwidth (requested bandwidth) to each of the logical channels when a total bandwidth allocated to the logical channels does not exceed a predetermined threshold bandwidth (total system bandwidth), and when a total bandwidth allocated to the logical channels exceeds the threshold bandwidth said allocation unit allocates the first bandwidth (requested bandwidth) to each of a part of the logical channels (high-priority channels) and a second bandwidth (minimum bandwidth), which is smaller than the first bandwidth, to each of another part of the logical channels (low-priority channels) (col. 6, line 66-col. 7, line 26 and col. 9, lines 24-41). Astle does this in order to "efficiently transfer digital information between multiple terminals over a single communication link" (col. 1, lines 6-10). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to allocate a first bandwidth to each of the logical channels when a total bandwidth allocated to the logical channels does not exceed a predetermined threshold bandwidth, and when a total bandwidth allocated to the logical channels exceeds the threshold bandwidth, to allocate the first bandwidth to each of a part of the logical channels and a second bandwidth, which is smaller than the first bandwidth, to each of another part of the logical channels in order to efficiently transfer digital information between multiple terminals over a single communication link.

7. Regarding claim 2, Edens in view of Astle discloses that the network is a ring-shaped transmission line (Edens: col. 9, line 56-col. 10, line 3).

8. Regarding claim 3, Edens in view of Astle discloses a determination unit determining a number of logical channels to be established in said network (Edens: col. 25, lines 9-12; col. 29,

line 46-col. 30, line 37; col. 32, lines 28-43; col. 33, lines 19-67; col. 34, lines 17-26; and col. 53, line 64-col. 54, line 55).

9. Regarding claim 4, Edens in view of Astle discloses an allocation unit allocating respective bands used to transmit picture data to the plurality of logical channels (Edens: col. 32, lines 28-43; col. 33, lines 19-67; col. 34, lines 17-26; and col. 53, line 64-col. 54, line 55).

10. Regarding claim 6, Edens in view of Astle discloses that priority is given in advance to the plurality of logical channels, and said allocation unit allocates respective bands to the plurality of logical channels based on the priority given to each logical channel (Astle: col. 6, line 66-col. 7, line 26 and col. 9, lines 24-41).

11. Regarding claim 8, Edens in view of Astle disclose that the distribution device generates a receiving instruction according to a received distribution instruction and transmits the receiving instruction to a corresponding receiving device via said network (Edens: col. 40, lines 7-44; col. 42, line 58-col. 44, line 33; and col. 53, line 64-col. 54, line 55).

12. Regarding claim 9, Edens discloses a distribution device which is used in a picture distribution system for distributing picture data from a distribution device to a plurality of receiving devices via a network where a plurality of logical channels are established by a time division multiplex method, comprising a distribution unit (DSS tuner or DVD player) distributing picture data to a plurality of receiving devices (television) with a function to receive picture data from a logical channel designated by a receiving instruction via a logical channel designated by a distribution instruction (col. 13, line 58-col. 14, line 30; col. 40, lines 7-44; col. 42, line 58-col. 44, line 33; and col. 53, line 64-col. 54, line 55); and an allocation unit for allocating respective bandwidth to the plurality of logical channels used to transmit picture data

according to the requirements of each particular media stream (col. 25, lines 9-12; col. 29, line 46-col. 30, line 37; col. 32, lines 28-43; col. 33, lines 19-67; col. 34, lines 17-26; and col. 53, line 64-col. 54, line 55).

Eden does not expressly disclose an allocation unit for allocating respective bandwidth to the plurality of logical channels used to transmit picture data according to a number of picture data to be transmitted; however, Eden does disclose that the bandwidth is allocated according to the requirements of each particular media stream (col. 25, lines 9-12). Astle teaches, in a system for transmitting multimedia streams, that the bandwidth of a video stream will vary according to the encoding technique used to encode the video stream, where the encoding technique dictates the quality of the video (col. 5, line 66-col. 6, line 14). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to allocate respective bandwidth to the plurality of logical channels used to transmit picture data according to a number of picture data to be transmitted since this is determine the quality of the received picture data stream.

Edens does not expressly disclose that the allocation unit allocates a first bandwidth to each of the logical channels when a total bandwidth allocated to the logical channels does not exceed a predetermined threshold bandwidth, and when a total bandwidth allocated to the logical channels exceeds the threshold bandwidth said allocation unit allocates the first bandwidth to each of a part of the logical channels and a second bandwidth, which is smaller than the first bandwidth, to each of another part of the logical channels. Astle teaches, in a system for transmitting multimedia streams, having an allocation unit allocate a first bandwidth (requested bandwidth) to each of the logical channels when a total bandwidth allocated to the logical channels does not exceed a predetermined threshold bandwidth (total system bandwidth), and

when a total bandwidth allocated to the logical channels exceeds the threshold bandwidth said allocation unit allocates the first bandwidth (requested bandwidth) to each of a part of the logical channels (high-priority channels) and a second bandwidth (minimum bandwidth), which is smaller than the first bandwidth, to each of another part of the logical channels (low-priority channels) (col. 6, line 66-col. 7, line 26 and col. 9, lines 24-41). Astle does this in order to "efficiently transfer digital information between multiple terminals over a single communication link" (col. 1, lines 6-10). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to allocate a first bandwidth to each of the logical channels when a total bandwidth allocated to the logical channels does not exceed a predetermined threshold bandwidth, and when a total bandwidth allocated to the logical channels exceeds the threshold bandwidth, to allocate the first bandwidth to each of a part of the logical channels and a second bandwidth, which is smaller than the first bandwidth, to each of another part of the logical channels in order to efficiently transfer digital information between multiple terminals over a single communication link.

13. Regarding claim 10, Edens discloses a receiving device which is used as one of a plurality of receiving devices in a picture distribution system for distributing picture data from a distribution device to a plurality of receiving devices via a network where a plurality of logical channels are established by a time division multiplex method and respective bandwidth is allocated to the plurality of logical channels used to transmit picture data according to the requirements of each particular media stream (col. 25, lines 9-12; col. 29, line 46-col. 30, line 37; col. 32, lines 28-43; col. 33, lines 19-67; col. 34, lines 17-26; and col. 53, line 64-col. 54, line 55), comprising a receiving unit (televisions) receiving a set of picture data from a logical

channel designated by a receiving instruction, the set of picture data being transmitted from a distribution device (DSS tuner or DVD player) with a function to distribute picture data via a logical channel designated by a distribution instruction (col. 13, line 58-col. 14, line 30; col. 40, lines 7-44; col. 42, line 58-col. 44, line 33; and col. 53, line 64-col. 54, line 55).

Eden does not expressly disclose allocating respective bandwidth to the plurality of logical channels used to transmit picture data according to a number of picture data to be transmitted; however, Eden does disclose that the bandwidth is allocated according to the requirements of each particular media stream (col. 25, lines 9-12). Astle teaches, in a system for transmitting multimedia streams, that the bandwidth of a video stream will vary according to the encoding technique used to encode the video stream, where the encoding technique dictates the quality of the video (col. 5, line 66-col. 6, line 14). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to allocate respective bandwidth to the plurality of logical channels used to transmit picture data according to a number of picture data to be transmitted since this is determine the quality of the received picture data stream.

Edens does not expressly disclose that respective bandwidth is allocated as a first bandwidth to each of the logical channels when a total bandwidth allocated to the logical channels does not exceed a predetermined threshold bandwidth, and when a total bandwidth allocated to the logical channels exceeds the threshold bandwidth the respective bandwidth is allocated as the first bandwidth to each of a part of the logical channels and a second bandwidth, which is smaller than the first bandwidth, to each of another part of the logical channels. Astle teaches, in a system for transmitting multimedia streams, having an allocation unit allocate a first bandwidth (requested bandwidth) to each of the logical channels when a total bandwidth

allocated to the logical channels does not exceed a predetermined threshold bandwidth (total system bandwidth), and when a total bandwidth allocated to the logical channels exceeds the threshold bandwidth said allocation unit allocates the first bandwidth (requested bandwidth) to each of a part of the logical channels (high-priority channels) and a second bandwidth (minimum bandwidth), which is smaller than the first bandwidth, to each of another part of the logical channels (low-priority channels) (col. 6, line 66-col. 7, line 26 and col. 9, lines 24-41). Astle does this in order to "efficiently transfer digital information between multiple terminals over a single communication link" (col. 1, lines 6-10). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to allocate respective bandwidth as a first bandwidth to each of the logical channels when a total bandwidth allocated to the logical channels does not exceed a predetermined threshold bandwidth, and when a total bandwidth allocated to the logical channels exceeds the threshold bandwidth the respective bandwidth is allocated as the first bandwidth to each of a part of the logical channels and a second bandwidth, which is smaller than the first bandwidth, to each of another part of the logical channels in order to efficiently transfer digital information between multiple terminals over a single communication link.

14. Regarding claim 11, Edens discloses a picture distribution system for distributing picture data from a distribution device to a plurality of receiving devices, comprising: a network where a fixed-length frame composed of a plurality of time slots are transmitted (col. 9, line 56-col. 10, line 21 and col. 29, line 46-col. 30, line 37); one or more distribution devices (DSS tuner or DVD player) storing first picture data in a first time slot of the fixed-length frame, storing second picture data in a second time slot of the fixed-length frame, and transmitting the fixed-length

frame to the network (col. 13, line 58-col. 14, line 30; col. 25, lines 3-20; col. 40, lines 7-44; col. 42, line 58-col. 44, line 33; and col. 53, line 64-col. 54, line 55); a plurality of receiving devices (televisions) receiving the respective picture data from the first or second time slots of the fixed-length frame according to a receiving instruction (col. 13, line 58-col. 14, line 30; col. 25, lines 3-20; col. 40, lines 7-44; col. 42, line 58-col. 44, line 33; and col. 53, line 64-col. 54, line 55); and an allocation unit for allocating respective bandwidth to the plurality of logical channels used to transmit picture data according to the requirements of each particular media stream (col. 25, lines 9-12; col. 29, line 46-col. 30, line 37; col. 32, lines 28-43; col. 33, lines 19-67; col. 34, lines 17-26; and col. 53, line 64-col. 54, line 55).

Eden does not expressly disclose an allocation unit for allocating respective bandwidth to the plurality of logical channels used to transmit picture data according to a number of picture data to be transmitted; however, Eden does disclose that the bandwidth is allocated according to the requirements of each particular media stream (col. 25, lines 9-12). Astle teaches, in a system for transmitting multimedia streams, that the bandwidth of a video stream will vary according to the encoding technique used to encode the video stream, where the encoding technique dictates the quality of the video (col. 5, line 66-col. 6, line 14). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to allocate respective bandwidth to the plurality of logical channels used to transmit picture data according to a number of picture data to be transmitted since this is determine the quality of the received picture data stream.

Edens does not expressly disclose that the allocation unit allocates a first bandwidth to each of the logical channels when a total bandwidth allocated to the logical channels does not exceed a predetermined threshold bandwidth, and when a total bandwidth allocated to the logical

channels exceeds the threshold bandwidth said allocation unit allocates the first bandwidth to each of a part of the logical channels and a second bandwidth, which is smaller than the first bandwidth, to each of another part of the logical channels. Astle teaches, in a system for transmitting multimedia streams, having an allocation unit allocate a first bandwidth (requested bandwidth) to each of the logical channels when a total bandwidth allocated to the logical channels does not exceed a predetermined threshold bandwidth (total system bandwidth), and when a total bandwidth allocated to the logical channels exceeds the threshold bandwidth said allocation unit allocates the first bandwidth (requested bandwidth) to each of a part of the logical channels (high-priority channels) and a second bandwidth (minimum bandwidth), which is smaller than the first bandwidth, to each of another part of the logical channels (low-priority channels) (col. 6, line 66-col. 7, line 26 and col. 9, lines 24-41). Astle does this in order to "efficiently transfer digital information between multiple terminals over a single communication link" (col. 1, lines 6-10). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to allocate a first bandwidth to each of the logical channels when a total bandwidth allocated to the logical channels does not exceed a predetermined threshold bandwidth, and when a total bandwidth allocated to the logical channels exceeds the threshold bandwidth, to allocate the first bandwidth to each of a part of the logical channels and a second bandwidth, which is smaller than the first bandwidth, to each of another part of the logical channels in order to efficiently transfer digital information between multiple terminals over a single communication link.

15. Regarding claim 13, Edens discloses a picture distribution method for distributing picture data from a distribution device to a plurality of receiving devices, comprising: establishing a

plurality of logical channels by a time division multiplex method (col. 9, line 56-col. 10, line 21); allocating respective bandwidth to the plurality of logical channels used to transmit picture data according to the requirements of each particular media stream (col. 25, lines 9-12; col. 29, line 46-col. 30, line 37; col. 32, lines 28-43; col. 33, lines 19-67; col. 34, lines 17-26; and col. 53, line 64-col. 54, line 55); distributing picture data via a logical channel designated by a distribution instruction (col. 13, line 58-col. 14, line 30; col. 40, lines 7-44; col. 42, line 58-col. 44, line 33; and col. 53, line 64-col. 54, line 55); and a plurality of receiving devices receiving respective picture data from logical channels designated by corresponding receiving instructions (col. 13, line 58-col. 14, line 30; col. 40, lines 7-44; col. 42, line 58-col. 44, line 33; and col. 53, line 64-col. 54, line 55).

Eden does not expressly disclose allocating respective bandwidth to the plurality of logical channels used to transmit picture data according to a number of picture data to be transmitted; however, Eden does disclose that the bandwidth is allocated according to the requirements of each particular media stream (col. 25, lines 9-12). Astle teaches, in a system for transmitting multimedia streams, that the bandwidth of a video stream will vary according to the encoding technique used to encode the video stream, where the encoding technique dictates the quality of the video (col. 5, line 66-col. 6, line 14). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to allocate respective bandwidth to the plurality of logical channels used to transmit picture data according to a number of picture data to be transmitted since this is determine the quality of the received picture data stream.

Edens does not expressly disclose that the allocating step allocates a first bandwidth to each of the logical channels when a total bandwidth allocated to the logical channels does not

exceed a predetermined threshold bandwidth, and when a total bandwidth allocated to the logical channels exceeds the threshold bandwidth said allocating step allocates the first bandwidth to each of a part of the logical channels and a second bandwidth, which is smaller than the first bandwidth, to each of another part of the logical channels. Astle teaches, in a system for transmitting multimedia streams, having an allocation unit allocate a first bandwidth (requested bandwidth) to each of the logical channels when a total bandwidth allocated to the logical channels does not exceed a predetermined threshold bandwidth (total system bandwidth), and when a total bandwidth allocated to the logical channels exceeds the threshold bandwidth said allocation unit allocates the first bandwidth (requested bandwidth) to each of a part of the logical channels (high-priority channels) and a second bandwidth (minimum bandwidth), which is smaller than the first bandwidth, to each of another part of the logical channels (low-priority channels) (col. 6, line 66-col. 7, line 26 and col. 9, lines 24-41). Astle does this in order to "efficiently transfer digital information between multiple terminals over a single communication link" (col. 1, lines 6-10). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to allocate a first bandwidth to each of the logical channels when a total bandwidth allocated to the logical channels does not exceed a predetermined threshold bandwidth, and when a total bandwidth allocated to the logical channels exceeds the threshold bandwidth, to allocate the first bandwidth to each of a part of the logical channels and a second bandwidth, which is smaller than the first bandwidth, to each of another part of the logical channels in order to efficiently transfer digital information between multiple terminals over a single communication link.

16. Regarding claim 14, Edens discloses determining a number of logical channels to be established according to a number of picture data to be transmitted (Edens: col. 25, lines 9-12; col. 29, line 46-col. 30, line 37; col. 32, lines 28-43; col. 33, lines 19-67; col. 34, lines 17-26; and col. 53, line 64-col. 54, line 55); and generating the distribution instruction based on the determined number of logical channels and allocated bandwidth (Edens: col. 35, lines 11-20; col. 39, line 47-col. 40, line 44; col. 42, line 58-col. 44, line 33; and col. 53, line 64-col. 54, line 55).

17. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Edens et al (USPN 6,611,537), of record, in view of Astle et al. (USPN 6,396,816), of record, as applied to claim 1 above, and further in view of Natarajan (USPN 5,742,594), of record.

18. Regarding claim 7, Edens in view of Astle does not disclose that priority is given in advance to the plurality of receiving devices; and said allocation means allocates respective bands to said plurality of logical channels based on the priority given to each receiving device; however, Edens in view of Astle does disclose using a priority value in order to determine a master clock device in the network (Edens: col. 48, lines 22-35 and col. 48, line 66-col. 49, line 43). Natarajan teaches, in a shared bandwidth communication network, that priority is given in advance to the plurality of receiving devices (defining a priority level for a group of devices based on a type of data transmission); and said allocation means allocates respective bands to said plurality of logical channels based on the priority given to each receiving device in order to allocate bandwidth to users requiring various types and amounts of data rate service (col. 1, line 64-col. 2, line 6; col. 3, lines 13-36; col. 5, lines 43-61; and col. 6, lines 20-64) where the type of transmission also defines a priority for the receiving device since the application at the receiving device which receives the information defines the type of data which is transmitted. It would

have been obvious to one of ordinary skill in the art at the time of the invention to give priority in advance to the plurality of receiving devices, and to allocate, by the allocation unit, respective bands to the plurality of logical channels based on the priority given to each receiving devices in order to allocate bandwidth to users requiring various types and amounts of data rate service.

19. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Edens et al (USPN 6,611,537), of record, in view of Astle et al. (USPN 6,396,816), of record, as applied to claim 11 above, and further in view of Champlin et al (USPN 4,665,518), of record.

20. Regarding claim 12, Edens in view of Astle does not disclose that if third picture data are requested to be distributed while the first and second picture data are being distributed, said one or more distribution devices store the first picture data in the first time slot of the fixed-length frame, store the second and third picture data in the second time slot of the fixed-length frame, and transmit the fixed length frame to said network. Champlin teaches, in a synchronous, time-division system, that if third data are requested to be distributed while the first and second data are being distributed, said one or more distribution devices store the first picture data in the first time slot of the fixed-length frame, store the second and third picture data in the second time slot of the fixed-length frame, and transmit the fixed length frame to said network in order to allow a single time slot to be shared (col. 18, lines 38-47) where it is implicit that sharing a single time slot increases the number of simultaneous users a system can support. It would have been obvious to one of ordinary skill in the art at the time of he invention to store the second and third picture data in the second time slot of the fixed-length frame in order to allow a single time slot to be shared which increases the number of simultaneous users a system can support.

Conclusion

21. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Aharoni et al. (USPN 6,014,694) see entire document which pertains to varying the transmission rate of video data depending on the number of picture data to be transmitted.

22. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel J. Ryman whose telephone number is (571)272-3152. The examiner can normally be reached on Mon.-Fri. 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (571)272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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